

CLAIMS

1. A loudspeaker apparatus comprising:
  - a loudspeaker array constructed by arranging a plurality of loudspeaker elements; and
- 5       an audio signal processing unit that outputs inputted audio signals of a plurality of systems to a plurality of loudspeaker blocks, respectively, the plurality of loudspeaker blocks being formed by grouping part of the plurality of loudspeaker elements.
- 10      2. The loudspeaker apparatus according to claim 1, wherein the loudspeaker array is constructed such that the plurality of loudspeaker elements are arranged in a form of a horizontal row to form each of the loudspeaker blocks, and the loudspeaker blocks are stacked in a plurality of stages.
- 15      3. The loudspeaker apparatus according to claim 1, wherein two or more loudspeaker blocks are overlap with respect to a same loudspeaker element.
- 20      4. The loudspeaker apparatus according to claim 2 or 3, wherein the loudspeaker blocks are respectively constructed as separate loudspeaker units, and the loudspeaker array is constructed by stacking the loudspeaker units.
- 25      5. The loudspeaker apparatus according to claim 1, wherein

the loudspeaker blocks include a loudspeaker block for a high range and a loudspeaker block for a low range, and a width of the loudspeaker block for the high range signal is smaller than a width of the loudspeaker block for the low range signal.

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6. The loudspeaker apparatus according to claim 1, wherein the loudspeaker array is constructed as loudspeaker rows each formed by arranging the plurality of loudspeaker elements in the form of a horizontal row are stacked in a plurality of stages.

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7. The loudspeaker apparatus according to claim 6, wherein the loudspeaker block is constructed so that the output sound pressure of the respective loudspeaker rows becomes substantially uniform.

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8. A loudspeaker apparatus comprising:

a loudspeaker array in which loudspeaker rows each formed by arranging a plurality of loudspeaker elements in a form of a horizontal row are stacked in a plurality of stages, and which

20 is disposed such that the loudspeaker elements of the loudspeaker rows stacked vertically are arranged in a zigzag form; and

an audio signal processing unit in which an audio signal is divided into a plurality of frequency bands, a high range signal thereof is inputted to a loudspeaker block constructed

25 by a partial width of loudspeaker rows in two stages or more,

and a low range signal thereof is inputted to a loudspeaker block constructed by the entire width of a single-stage loudspeaker row.